

What is claimed is:

1. A gravity motor comprising:
  - a support structure;
  - an output shaft rotatably mounted to said support structure;
  - 5 a rotor having a hub and a plurality of radial arms secured to said output shaft;
  - a plurality of movable weights wherein at least one of each of said movable weights is slidably connected on one of each of said plurality of radial arms;
  - 10 a first guide surface mounted on said support structure wherein said first guide surface is positioned to be contactable by each of said movable weights, said first guide surface causing each of said movable weights to move from a distal end of said plurality of radial arms toward said hub as said rotor rotates; and
  - 15 a second guide surface mounted on said support structure wherein said second guide surface is positioned to be contactable by each of said movable weights, said second guide surface causing each of said movable weights to move from said hub to said distal end of said radial arms as said rotor rotates;
  - 20 wherein said rotor with said plurality of weights, said first guide surface and said second guide surface are collectively a drive unit whereby said movable weights located at said distal end of said radial arms results in an overall torque caused by gravity causing rotation of said output shaft.

2. The gravity motor of Claim 1 further comprising two or more of said drive units.

3. The gravity motor of Claim 1 wherein said movable weights further include bearings.

5 4. The gravity motor of Claim 1 wherein said rotor is a unitary component.

5. The gravity motor of Claim 1 wherein said radial arms are removably attached to said hub.

6. The gravity motor of Claim 1 wherein said hub is removably attached to said output shaft.

10 7. The gravity motor of Claim 1 wherein said support structure is a housing.

8. The gravity motor of Claim 1 wherein said first guide surface causes said movable weights of each of said radial arms to slide from the distal end of each of said radial arms to said hub during about a 90° angle of rotation.

9. The gravity motor of Claim 1 wherein said second guide surface causes said movable weights of each of said radial arms to slide from the hub to the end of said radial arm during an angle of rotation of about 110°.

10. The motor of Claim 1 wherein each of said plurality of weights begins contact with said first guide surface when the gravitational potential energy of said weight is at its minimum.

11. A gravity motor comprising:

5           a support means;  
          a rotatable shaft means mounted to said support means;  
          hub means fixedly attached to said shaft means, said hub means having a plurality of radial weight holding means;  
          movable weight means slidably connected to each of said weight holding  
10           means;  
          a first means for moving each of said movable weight means from a distal end  
          of said weight holding means to said hub means; and  
          a second means for moving each of said movable weight means from said  
          hub means to said distal end of said weight holding means;  
15           whereby said movable weight means located at said distal end of said weight  
          holding means results in an overall torque caused by gravity causing  
          rotation of said output shaft means.

12. The gravity motor of Claim 11 wherein said movable weight means further  
20           include bearing means.

13. The gravity motor of Claim 11 wherein said hub means and said weight holding means are a unitary component.

14. The gravity motor of Claim 11 wherein said weight holding means are removably attached to said hub means.

5 15. The gravity motor of Claim 11 wherein said hub means is removably attached to said output shaft means.

16. The gravity motor of Claim 11 wherein said support means is a housing.

17. A method of making a gravity motor, said method comprising:

supporting a rotatable output shaft to a support structure;

fixedly attaching a rotor comprising a hub and a plurality of radial arms to said output shaft;

connecting a slidable movable weight to each of said radial arms;

positioning a first guide surface to one side of said output shaft wherein said

first guide surface is contactable by each of said movable weights causing

15 said movable weights to move from the distal end of said radial arms toward the hub; and

positioning a second guide surface on an opposite side of said output shaft

wherein said second guide surface is contactable by each of said movable

weights causing said movable weights to move from the hub to the distal end of said radial arms;

whereby said movable weights at the distal end of said radial arms impart the rotational torque caused by the pull of gravity on said movable weights.

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18. The method of Claim 17 further comprising beginning contacting each of said movable weights with said first guide surface when the gravitational potential energy of said movable weight is at about its minimum.

10 19. The method of Claim 17 further comprising contacting said movable weights with said second guide surface when said movable weight is at a rotational position approximately opposite its rotational position when the gravitational potential energy of said movable weight is at about its minimum.

20. A method of producing rotational torque using the pull of gravity, said method comprising:

15 attaching a rotor to a rotatable shaft, said rotor having a hub with a plurality of radial arms wherein each radial arm has a slidable weight thereon; moving each of said slidable weights, in turn, from the distal end of said radial arms toward said hub through an angle of rotation of about 90° beginning when said weight reaches a rotational position where the gravitational potential energy of said weight is at about its minimum; and

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moving each of said slidable weights, in turn, away from said hub to the distal end of said radial arms through an angle of rotation of about  $45^\circ$  to about  $110^\circ$  beginning when said slidable weight is at a rotational position about opposite its rotational position when the gravitational potential energy of said weight is at about its minimum.

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